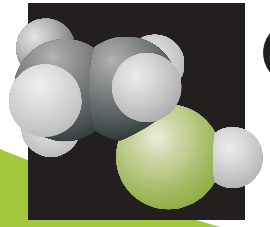


OIT's Chemical Partnership Portfolio

Materials

- Corrosion Monitoring System
- Alloy Selection System
- Alloys for Ethylene Production
- Metal Dusting Phenomena
- Mixed Solvent Corrosion
- Membrane Module Tubesheet
- Membrane for p-Xylene Separation
- Succinic Acid from Lignocellulose
- Separation of Hydrogen/Light Hydrocarbon Gases
- Materials for Electrochemical Reactors
- Membrane Reactor Designs for Olefin Production
- Oil Refinery Pipe Hangers
- Phase Transfer Catalysis
- Selective Inorganic Thin Films
- Carbon Membranes for Light Gas Separations
- Laser-Ultrasonic Measurement of Seamless Tubes
- Evaluation of High Molybdenum Stainless Steel
- Acoustic Monitoring of Corrosion in Recovery Boilers
- Biocatalytic Processing of Lignocellulosic Feedstocks

Chemical Processing Technology

- Catalytic Hydrogenation Reactor Retrofit
- Integrated Workbench for Gas Phase Thermodynamics
- Separation of Hydrogen/Light Hydrocarbon Gas Mixtures
- Advanced Membrane Materials
- Nanoscale Catalysts
- Direct Production of Silicones From Sand
- Oxidative Cracking of Hydrocarbons to Ethylene
- Selective Oxidation of Aromatic Compounds
- Multi-Phase Computational Fluid Dynamics
- Instrumentation for Multi-Phase Flows
- Intelligent Extruder
- Development of Non-Aqueous Enzymes
- Sorbents for Gas Separation
- New Catalyst Oxidation of Feedstock
- Electrochemical Reactors for Chlor-Alkali
- Selective Catalytic Dehydrogenation of Alkanes to Olefins
- Clean Fractionation: Cellulose for Plastics
- Sonic-Assisted Membrane Processing
- Hydrocarbon Leak Detector
- Low-Profile Catalytic Cracking Demonstration
- Sensor System for Gaseous Nitrogen Transfer
- Separation of Aromatic Isomers
- Solid State Sensors to Monitor Hydrogen
- Supercritical Fluid Purification
- Advanced Refining Process Analysis
- Advanced Wireless Sensors
- Bubble Control in Oxygen-Based Bleaching
- Olefin Recovery from Chemical Industry Waste Streams Stations
- Laser Ultrasonic Furnace Tube Coke Monitor
- Sensor Fusion for Intelligent Process Control
- Regenerability of Catalysts for Destruction of Tars

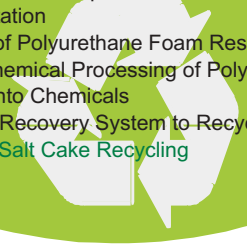
New Products & Markets

Energy Efficiency

- Practical Minimum Energy
- Plant-Wide Assessments
- Metrics of Chemical Industry Performance
- Total Cost Accounting for Chemical Manufacturing
- Industrial Assessment Centers
- Efficient Motor, Steam, and Compressed Air Systems
- Low NOx Boilers and Burners
- Thermal Imaging Control of Furnaces

Environment & Recycling

- PSA Technology to Product Recovery
- Electrodeionization for Product Purification
- Olefin Recovery from Chemical Waste Streams
- Solvent Vapor Recovery
- Thermal Swing Absorption for Producing Oxygen
- Methanol Recovery from Hydrogen Peroxide
- Coupled Physical/Chemical & Biofiltration
- Selective Surface Flow Membrane
- Nylon 6 Carpet Recycling
- VapoSep Membrane Vapor Recovery
- VOC Control in Kraft Mills
- Recovery of Thermoplastics via Froth Floatation
- Recovery of Polyurethane Foam Residue
- Flexible Chemical Processing of Polymeric Materials into Chemicals
- Integrated Recovery System to Recycle Solvents
- Aluminum Salt Cake Recycling



Direct: $145 million

Relevant: $39 million